

Response
Application No. 10/763,423
Attorney Docket No. 042046

AMENDMENTS TO THE CLAIMS

Listing of claims:

This listing of claims replaces all prior versions of claims in the application.

1. (Currently Amended) An image capture apparatus, comprising:
 - a camera for capturing image data of an object ~~to be captured~~;
 - an illumination illuminating the object ~~to be captured~~ using a plurality of wavelengths;
 - a storage unit storing a recorded image of an object ~~to be captured~~;
 - a comparison-determination unit comparing the recorded image with obtained captured image data of the object ~~to be captured~~ and determining whether or not the recorded image and the captured image data match each other; and
 - a material determination unit determining the material of the object ~~to be captured~~ from the image data of the object ~~to be captured~~ which has been obtained using the plurality of wavelengths, wherein
 - ~~said image data can be obtained by placing the object to be captured the camera captures the image data of the object placed above the camera and the illumination.~~

Response

Application No. 10/763,423
Attorney Docket No. 042046

2. (Original) The apparatus according to claim 1, wherein
said illumination has a plurality of light sources having
intensity peaks of different wavelengths, switches these light
sources, and obtains an image of the object to be captured using
the plurality of wavelengths.

3. (Original) The apparatus according to claim 1, wherein
said illumination has a light source emitting light of a
continuous range of wavelengths, and when the camera captures an
image, an image of a specific wavelength is obtained using a
filter.

4. (Original) The apparatus according to claim 1, further
comprising:

a brightness correction unit correcting a difference in
brightness of illumination of light between different wavelengths
on the object to be captured.

5. (Original) The apparatus according to claim 4, wherein
said brightness correction unit comprises a brightness
correction table storing a correction coefficient for correction
of brightness.

Response

Application No. 10/763,423

Attorney Docket No. 042046

6. (Original) The apparatus according to claim 4, further comprising:

a distance sensor measuring a distance to the object to be captured, wherein

said brightness correction unit comprises a brightness correction table storing a correction coefficient for correction of brightness for each distance to the object to be captured.

7. (Original) The apparatus according to claim 1, wherein

material determination is performed on the object to be captured using a part of an image of the object to be captured.

8. (Original) The apparatus according to claim 1, wherein

as a result of the material determination, information about a capturing operation in which a different material is detected is stored when the material of the object to be captured is determined to be different from a predetermined material.

9. (Original) The apparatus according to claim 1, wherein

an image obtained using one wavelength emitted by the illumination is compared with the recorded image.

Response

Application No. 10/763,423
Attorney Docket No. 042046

10. (Original) The apparatus according to claim 1, further comprising:

a monitor unit indicating to a user a state in which the object to be captured is held.

11. (Original) The apparatus according to claim 1, wherein image data are obtained using different wavelengths between an even-numbered row and an odd-numbered row of a scanning line of an image obtained by said camera.

12. (Currently Amended) The apparatus according to claim 1, further comprising:

an image buffer storing ~~an obtained~~ the captured image, wherein

the image data is obtained captured first for material determination, the image data only required for the material determination is stored in the image buffer, the image data for comparison with the recorded image is obtained captured second, and ~~the image data is obtained in a reverse order~~, thereby setting memory requirements for ~~an~~ the image buffer smaller than an amount of data which can be stored in the image buffer.

Response

Application No. 10/763,423
Attorney Docket No. 042046

13. (Original) The apparatus according to claim 1, further comprising:

a brightness correction unit having a brightness correction table storing a correction coefficient for correction of brightness to correct a difference in brightness of light between different wavelengths emitted to the object to be captured.

14. (Original) The apparatus according to claim 13, wherein said brightness correction table is generated by comparing data obtained when said image capture apparatus performs a first operation with recorded data using the obtained data when similarity is within a predetermined range.

15. (Original) The apparatus according to claim 1, wherein a standard reflecting object is captured together with the object to be captured to correct a difference in brightness of the object to be captured and illuminated by light having different wavelengths.

16. (Original) The apparatus according to claim 1, further comprising a network communications function.

Response

Application No. 10/763,423
Attorney Docket No. 042046

17. (Original) The apparatus according to claim 16, wherein

The recorded image and wavelength characteristic of the recorded image are recorded in the apparatus connected over a network, or the recorded image and the wavelength characteristic of the recorded image are updated at an instruction from the apparatus.

18. (Original) The apparatus according to claim 16, wherein

in network communications, encrypted data are communicated.

19. (Original) The apparatus according to claim 1, further comprising:

an external storage medium access unit reading data from an external storage medium, wherein

the recorded image and wavelength characteristic of the recorded image are recorded and updated from the external storage medium.

20. (Original) The apparatus according to claim 1, further comprising:

Response

Application No. 10/763,423
Attorney Docket No. 042046

a peripheral image capture camera capturing a state of a surrounding area when the object to be captured is taken.